Strategram

Change

Staying power

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The staying power of the Strategic Instruction Model owes much to the people—the teachers, administrators, researchers, and professional developers—who are committed to SIM. In recent years, we have seen numerous efforts take root and grow at the school, district, and state levels. The issue of staying power, of what is involved in ensuring *sustained* use of a new intervention or program, concerns everyone involved in these efforts.

Recently, Russell Gersten, director of the Eugene Research Institute and professor in the College of Education at the University of Oregon, offered a review of research on sustained change. Gersten focused on the process of change and the forces that bear on whether an intervention or program will see continued use in a classroom. His observations can help us navigate the barriers we may encounter as we plan new SIM programs or expand existing programs. His review addressed five themes:

1. The typical process of change in teaching from the teacher's perspective
2. A craving for concreteness and specificity
3. Attitudes
4. Efficacy as a key predictor of teachers' ability to benefit
5. The roads to sustained use

> We need both understanding and change in practice, because then people think about the interventions, they know why they're using it, and they're comfortable using it.

Theme 1: The typical process of change in teaching from the teacher's perspective

Typically, Gersten said, teachers involved in any change process will progress through four stages on the way to sustained

Russell Gersten

use. Recognizing these stages will enable those working for change to improve communication and to respond more effectively to the concerns and needs manifested at each level.

Initially, he said, teachers may focus on management or personnel concerns, such as "How am I going to manage this group of 10-year-olds?" Much of the first year of the change process is spent trying out the intervention and figuring out how to manage new processes. Teachers have to work through the real, legitimate concerns at this level before moving on to the next step: integration or routine use.

"This can take awhile," Gersten said. "In between is mechanical or jerky or erratic use. It's a part of learning."   >>>

>>>   Routine use of the intervention often will not occur until the second year of implementation.

In the third stage, teachers develop a deeper understanding of the intervention and the effect it has on students. They recognize that by spending a few extra minutes on one part of the intervention, for example, they will reach more students.

"They start to really talk about the kids and the impact of the new strategy on specific kids," Gersten said.

Finally, teachers reach a stage of refinement—tweaking processes for greater benefits.

"They understand the concept or what we're trying to do with this strategy," he said.

For professional developers and members of teams working toward implementing a new program or intervention, understanding this predictable cycle is essential.

"If the person is dealing with mechanical concerns, and you're really showing your data on the students, there's a mismatch," Gersten explained. "They want to know how to manage the kids, how to manage this thing, while you're talking about student performance. Historically, this can be a source of miscommunication."

Theme II: Craving for concreteness and specificity

"By and large, teachers have a craving, a hunger, for concreteness and specificity," Gersten said. "Not that they want to be told exactly what to do every minute of the day. This is something about the profession of teaching. It's very different from many other professions.

Teaching is grounded in concrete operations."

The challenge for individuals advocating change is that if they focus too much on the concrete level that is so important to teachers and don't move on, then teachers don't build the abstract

understanding of why using a certain strategy works. The abstract principles behind the change are important to the sustained use of any intervention.

The hook for moving beyond the concrete to changing behavior may lie in the way teachers think, Gersten said. Teachers tend to think in "action frames," much like a movie director. They play through scenarios such as "If I add this to the lesson, what's going to happen?"

Professional developers and others working for change might be able to leverage this way of thinking by building activities and providing information that feed into the action frame way of thinking.

Theme III: Attitudes

Research has found that teachers' attitudes toward a new intervention before a change process begins have no bearing

on the likelihood of the intervention being successfully adopted, Gersten said.

"What did matter was the attitudes at the end of the year," he said. "If they tried it out or they tried it out in a very half-hearted way, and they still thought it didn't help, then their attitudes mattered."

By March, Gersten found, teachers knew, based on real experiences, whether they liked the intervention. One interpretation of this finding, he said, is that people cannot have knowledgeable attitudes about an intervention until they have tried it.

The lesson for those working to implement a new SIM intervention or program is to not work obsessively to build positive attitudes. You want to build positive attitudes, he said, "but don't obsess on it. Just get the momentum going."

Theme IV: Efficacy as a key predictor of teachers' ability to benefit

Self-efficacy—"an 'I can do it' approach to teaching"—is a strong predictor of teachers' willingness to participate in and ability to benefit from professional development, Gersten said. Research indicates that the >>> culture of some schools and

Concrete craving

Gersten noted that from the beginning, the University of Kansas Center for Research on Learning has tended to teachers' craving for concreteness. KU-CRL products—manuals for learning strategies and content enhancement routines—provide explicit guidelines for teaching while allowing room for teachers to adapt to the specific needs in their classrooms.

>>> districts builds self-efficacy in their teachers, he said. Often, those schools show good retention rates for experienced teachers, and teachers feel supported. Factors such as scores on state assessments or socio-economic status of the school have little bearing on this culture.

"The issue we face is how do we build self-efficacy in teachers?" Gersten said. "It's above and beyond how to implement strategies. I don't think we know so much about this yet."

One hope of Gersten and his research team is that self-efficacy can be enhanced by providing opportunities for teachers to talk with a coach, mentor-teacher, or team. Another hope is that as teachers become more successful with students, they will feel more efficacy. Gersten and his co-researchers continue to study these aspects of the change process.

Theme V: The roads to sustained use

Gersten described two roads that can lead to a new intervention becoming a standard practice in schools.

"The 'typical road' is administrative fiat," he said. If administrators mandate that teachers adopt a certain program or intervention, teachers will do it, especially if they know the program or intervention will be part of a state assessment.

Case studies have found that administrative fiat does lead to sustained change. The problem, Gersten said, is that superintendents and other administrators come and go, and when they go, so might support for the programs they have mandated.

Gersten calls the second approach to sustained change the "high road." The high road

Conceptual Model of Sustained Use
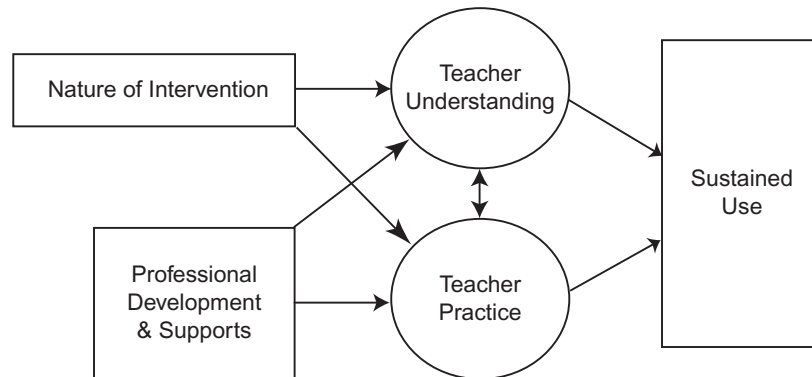
(Gersten, Chard, & Baker, 2001)

Figure 1

involves two components:
- supporting practice mastery, in which teachers reach a routine, comfortable use of an intervention through practice
- building commitment to the change at a deep level, beyond "because the superintendent says so."

Gersten and his co-researchers have developed a conceptual model of sustained use (Figure 1) reflecting these two components in its emphasis on understanding and practice.

"It is not true that understanding must come before change in practice," Gersten said. "These two are integral. We need both of these all the time, because then people think about the intervention, they know why they're using it, and they're comfortable using it."

Gersten cautioned that policymakers often overlook the importance of practice mastery when implementing a new intervention or program. "It's not conceptualized in such a way that people are masterful, successful users of the intervention," he said. "It is a real tension in terms of sustained use."

Because of this reality, individuals working for change must be strong advocates for practice mastery to ensure successful, long-term implementation.

The up-and-down nature of change

One reality that has been driven home in Gersten' research is that every person involved in implementing new interventions experiences trough periods.

Multiple factors—from balancing the needs of different groups of students to uneven collegial relationships to outside influences such as family stresses—influence an individual's ability and desire to implement a new intervention. In addition, the change may actually clash with the teacher's conception of what it means to be a teacher.

The point, Gersten said, is that change advocates should accept these trough periods and not feel defeated by them.

"You're planting seeds," he said. "These are adult learners, but they are learning. Many other things go on in their lives, and all their energy is there."

In addition, Gersten said, a teacher's enthusiasm for a >>>

>>> new intervention may be dampened when the benefit for students is not immediately evident. To help counteract this, he advised, make minimal change visible through measurement and ask students for a self-appraisal, which can be done quickly and give teachers reinforcing feedback.

Gersten's observations of these trough periods can increase understanding for those introducing new methods or interventions to school faculty, but it can help teachers understand students, too.

"When I started looking at the up-and-down nature of change, I said, 'Well, that's the nature of adult learning,' but I think that fits how kids learn too. When you're actually teaching a kid day to day, there are some mornings when all these things kick in. Things are going on in their lives, too," Gersten said.

The power to change

As advocates for the Strategic Instruction Model, we have seen through research and classroom experience the benefits for students when components of SIM are implemented. Gersten's observations about the nature of change complement our work. Understanding the change process will allow us to respond more effectively to the concerns that arise at each stage. Understanding the factors that lead to long-term use of a new intervention in today's classrooms, combined with our enthusiasm to expand the benefits of SIM to more students, can create powerful momentum for SIM programs.
●

Vision in the classroom

In addition to studying the issue of sustained change in classroom practices, Gersten has considered the role that vision plays in teaching.

Even if they don't share it, teachers do have visions of what they should or should not be doing, he said. Sometimes, the changes they are asked to make as part of implementing a new program or intervention clash with that vision. Professional developers and others working for change should be sensitive to this fact.

To really understand a teacher's unexpressed vision, Gersten recommends posing situational questions. How a teacher responds to a specific situation will help you understand that individual's vision of teaching.

In a community of teachers, individual teachers' visions can combine to create powerful benefits for students. For example, each teacher may value a different aspect of teaching and may develop greater expertise in that area. In a supportive team environment, this diversity of interests and expertise can lead to stronger programs.

For example, one teacher may be deeply interested in choosing examples for math problems or history problems. By sharing the examples with the teaching community, the teacher may inspire another to develop innovative ideas for putting the examples into practice and involving low-achieving students. Working this way means individual teachers can value different aspects of teaching and together bring about amazing results for students.

The Learning Lightbulb
Using learning principles to work smarter

SIM Trainer and learning specialist **Gail Cheever** of Trophy Club, Texas, presented this Learning Lightbulb during the 2001 International SIM Trainers' Conference. She uses the Learning Lightbulb to teach students to use eight learning principles to monitor and manage their own learning. The Learning Lightbulb package encompasses a visual device (page 6), a teacher guide (this page), and student self-questions (page 7).

Learning Principles

Ask students to explain how each picture might symbolize something about learning. *Learning is facilitated when...*

Boomerang 1. **Appropriate *feedback* is present**
appropriate = *timely* and *specific*
self-generated and/or from other sources

Questions 2. ***Questioning* is used**
importance of questions and self-questioning
higher levels of thinking required to formulate questions

Bull's Eye 3. ***Objectives* are clear and focused**

Jigsaw 4. ***Whole/parts/whole* relationships are understood**
importance of a *framework*

Chains 5. ***New information* is related to *known information***
background knowledge and prior experience make learning easier

Happy Face 6. ***Motivation* is sustained**

Clock 7. **Learning tasks are *divided* into parts and *distributed* over time in short segments**
helps motivation
easier to be flexible

Eye 8. ***Point of view* is considered** and you move from *right vs. wrong* to *points of view;* understanding is enhanced when you see things from different points of view

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(Learning Lightbulb: Student self-questions)

Learning Principles

Ask yourself:

1. Have I got the feedback I need?

2. Am I asking the right questions?

3. Am I on target?

4. Have I got the big picture? How do the parts relate to the whole?

5. Have I linked what I am learning to my experience and knowledge?

6. How can I motivate myself to learn this?

7. Have I divided up the tasks into smaller pieces and worked on them over time?

8. Have I looked at this from another point of view?

Weekly strategy nights

The University of Kansas Center for Research on Learning's *Pathways to Success* project (see *Strategram* Vol. 13, No. 5, July 2001, or visit www.ku-crl.org/pathways) has added a weekly strategy night this year at all six of the middle schools in the Topeka, Kansas, public school district.

Strategy nights involve students and parents learning strategies together. In pilots of the program last year, project staff report, many students turned their academic years around simply by learning how to organize their notebooks, lockers, and backpacks.

Pathways staff plan the following topics for this year's weekly strategies nights:
- How to organize your notebook
- How to use your planner
- How to organize your backpack
- How to organizer your locker
- Assignment completion strategies
- Listening and note-taking strategies
- Test-taking strategies
- Memory strategies
- Problem-solving strategies.

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